

CLAIMS:

1. A computer graphics system for rendering an image for display using forward texture mapping, pixels of the image being specified according to a predetermined pixel grid in a screen space; the image including at least one object modeled by primitives; the system including:
 - 5 - a texture memory (134) for storing at least one texture map; texels of a texture map being specified according to a predetermined texel grid in a texture space;
 - a rasterizer (120) operative to, for each primitive in the texture space, determine associated texels that at least partly fall within the primitive and to assign texel attributes to the associated texels;
 - 10 - a contribution filter (810) operative to, for each primitive in the texture space, filter a continuous signal describing the primitive, yielding, when sampled for a given texel position, a respective contribution factor providing a measure of overlap of the corresponding texel with the primitive in texture space;
 - a texel shader (130) operative to, for each primitive in the texture space, transform texel attributes of the associated texels to color attributes of the texels; and
 - 15 - a screen space resampler (140) operative to resample color attributes of the texels according to the predetermined pixel grid forming pixel data for the display using the contribution factor as a weight.
- 20 2. A computer graphics system as claimed in claim 1, wherein the contribution filter is an area filter, where the contribution factor depends on a percentage of area overlap of a texel footprint in the texel grid with the primitive.
3. A computer graphics system as claimed in claim 2, wherein in the area filter is
25 operative to analytically determine the area overlap.
4. A computer graphics system as claimed in claim 3, where the analytic determination includes determining, for a texel footprint that is not is fully outside or inside a

primitive, intersection points between a boundary of the primitive and a boundary of the texel footprint.

5. A computer graphics system as claimed in claim 4, including pre-calculation
5 boundary equations for the boundary of the primitive and applying the boundary equations to each of the texel footprint that is not is fully outside or inside the primitive.

6. A computer including a central processing unit, a memory, a display, and a
computer graphics system as claimed in claim 1.

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7. A method of rendering an image for display using forward texture mapping,
pixels of the image being specified according to a predetermined pixel grid in a screen space;
the image including at least one object modeled by primitives; the method including:

- storing at least one texture map; texels of a texture map being specified
15 according to a predetermined texel grid in a texture space;
- for each primitive in the texture space:
 - determining associated texels that at least partly fall within the
primitive and to assign texel attributes to the associated texels;
 - filtering a continuous signal describing the primitive, yielding, when
20 sampled for a given texel position, a respective contribution factor providing a measure of
overlap of the corresponding texel with the primitive in texture space; and
 - transforming texel attributes of the associated texels to color
attributes of the texels; and
- resampling color attributes of the texels according to the predetermined pixel
25 grid forming pixel data for the display using the contribution factor as a weight.

8. A computer program operative to cause a processor to perform the method of
claim 7.